

CLEAN COPY OF AMENDED CLAIMS

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1. (Amended) A Schottky barrier diode comprising:
a substrate region of a first conductivity type formed underneath a
semiconductor material layer of the same conductivity type;
a metal layer; and
at least two doped regions of a second conductive type formed in said
semiconductor material layer, each one of said doped regions being disposed
under said metal layer and being separated from the other doped region and
said substrate region by portions of said semiconductor layer.

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6. (Amended) The Schottky barrier diode according to claim 1, in
which said doped regions further comprise heavily doped body regions having
the same conductivity type of said doped regions.